

TWO NEW SPECIES OF *CORDULINA*.

BY ROBERT McLACHLAN, F.R.S., &amp;c.

*HEMICORDULIA FIDELIS*.

♂. Abdomen, 35 mm. Posterior-wing, 34 mm.

Wings hyaline, the posterior very slightly tinged with yellowish in the basal third: neuration black, the costal vein black externally: pterostigma black, 2 mm.; 7-8 ante-cubital and 6 post-cubital nervules in anterior-wings: membranule cinereous, slightly paler at base.

Face entirely yellow (but the base of the labrum slightly olivaceous), labium and its lobes yellow; top of front, and vesicle, shining metallic-green, slightly chalybeous, bordered with brownish; occiput black. Thorax (much crushed) apparently for the most part yellowish above, but with broad median metallic-green bands (probably densely clothed with cinereous pubescence); sides metallic-green, varied with yellow (or *vice versa*). Abdomen nearly cylindrical, above bronzy-green (scarcely metallic), segments 8-10 black, the 10th slightly yellowish posteriorly: viewed laterally there is a large elongate brown spot on each segment, from 2 to 7, not reaching the posterior margin of the segments, and a vestige at the base of segment 8; beneath, the abdomen is almost wholly brownish-yellow, but with a broad blackish space at the posterior end of each segment. Legs black, the anterior femora wholly, and the intermediate outwardly, brownish: length of posterior tibiae,  $6\frac{1}{2}$  mm.

Appendages wholly black. Superior appendages shorter (3 mm.) than segments 9 and 10 combined; viewed from above, they converge in a triangular manner gradually from base to apex, slightly sinuate externally in the basal half, the apical half thickened, sub-cylindrical, the apex sub-obtuse: viewed laterally, they are cylindrical, curved and rather slender at the base, followed by a *short broad triangular tooth* on the lower edge, after which they become thickened, the sub-obtuse apex slightly acuminate; they are clothed with short black hairs. Inferior appendage scarcely shorter than the superior, very elongately triangular, the apex obtuse and slightly curved upward.

♀ unknown.

*Hab.*: Uvea, Loyalty Islands (near New Caledonia), 1 ♂ in my collection.

This would appear to be in some respects intermediate between the groups of *H. oceanica* and *H. australis*, but more probably belongs to the latter group. The *short triangular tooth* on the lower edge of the superior appendages is a good character. The condition of the thorax in the type prevents exact description of the distribution of the pale and metallic colours.

*TETRAGONEURIA CANIS*.

♂. Abdomen, 34 mm. Posterior-wing, 32 mm.

Wings hyaline, very faintly smoky: neuration black, the costal vein yellowish externally; pterostigma black,  $2\frac{1}{2}$  mm.; 8 ante-cubital and 7 post-cubital nervules in anterior-wings. In the posterior-wings there is a small, fureate, basal, blackish-

fusca spot, not extending to the first ante-cubital, and another small spot of similar colour below it, bordering the membranule, and continued outwardly on the two cross-nervules in the second series of anal cellules (in the specimen before me the triangles have a cross-nervule in both anterior-wings, and in the left posterior; it is empty in the right posterior); membranule whitish-cinereous.

Head dingy-yellow; in the excision of the top of the front is a triangular black mark, extended, as a line, along the upper margins of the eyes (antennæ black); the head is clothed with cinereous pilosity, especially dense on the vesicle, and on the occiput, where it forms a long erect fringe: back of head yellow, margined with black, and with a dense whitish-cinereous fringe. Thorax pale olivaceous, very densely clothed with cinereous pilosity; the dorsal crest, a broad humeral band, and two lines on the sides, black or blackish, the space between the two lateral lines is yellow (in which is placed the black spiracle). Abdomen moderately depressed; pale at the base, but there is a broad black dorsal band extending from the middle of the third segment to the apex, expanded at the posterior end of each segment, and leaving an elongate lateral brownish-yellow space on each segment, from 4 to 8 (the coloration of the ventral surface is nearly similar; but the pale is more prominent and the dark more subdued): on the 10th dorsal segment there is a central straight carina, on either side of which is a faint curved carina; the outer edge of this segment slightly excised. Legs black; the anterior pair yellowish up to near the end of the femur.

Appendages black. The superior appendages (3 mm.) not quite so long as the 9th and 10th segments combined: viewed above, they are straight, convergent, and sub-cylindrical, but somewhat before the apex they dilate, and become almost two-branched, the inner branch forming a short triangular tooth, the outer being much longer, curved outwardly, and stout and obtuse at the apex, its inner edge excised: viewed from the side, these appendages are very straight, gradually thickened, with a triangular production or tooth near the middle of the lower edge; *the apical portion in this position may be compared in form to a dog's (or wolf's) head, with long profile and short erect ears.* Inferior appendage extending to the portion of the superior, where these latter become suddenly altered in form (yellowish internally above), rather broad, slightly curved upward, the apex broadly excised, leaving the outer angles very prominent.

[♀ unknown to me, but I believe that both sexes exist in the collection of my friend Baron De Selys-Longchamps.]

*Hab.*: Western North America (Washington Territory, collected by the late *H. K. Morrison*). In my collection.

In general form, dense pubescence, &c., this quite agrees with the allied species. In the form of the spot on the top of the front it approaches *cynosura*, Say, and in the shape and extent of the dark spots at the base of the posterior-wings there is resemblance to *spinigera*, Selys. The shape of the apical portion of the superior appendages, seen laterally, is such as (in the absence of figure) to have occasioned a familiar comparison, and it also suggested the specific name.